

AMENDMENTS TO THE CLAIMS

This listing replaces all prior versions and listings of claims in the application.

Listing of Claims

1. – 20. (Cancelled)

21. (Currently Amended) The method of claim [[20]] 24, wherein one optical fiber is employed.

22. (Currently Amended) The method of claim [[21]] 24, wherein two optical fibers are employed, said monitoring light is transmitted through the first optical fiber, and said welding laser is transmitted through the second optical fiber.

23. (New) The method of claim 22, wherein the distal end of the first optical fiber and the distal end of the second optical fiber are located at the same position.

24. (New) A method for closing a hole formed in a blood vessel wall of a subject by a sheath holding a catheter that was inserted into the blood vessel wall, comprising:

(A) introducing into the sheath at least one of a first optical fiber and a second optical fiber; then

(B) transmitting monitoring light through an optical fiber in the sheath, from the proximal end of said fiber to its distal end, and onto tissue of the subject; then

(C) monitoring the amount of light backscattered from tissue in the subject and, when the tissue that surrounds the distal end of the optical fiber is determined to be a blood vessel wall; and then

(D) generating a welding laser and transmitting it through the optical fiber in the sheath to impinge on the hole in the blood vessel wall while the sheath and the optical fiber are pulled away from the hole,
with the provisos (i) that, when one optical fiber is employed, that optical fiber transmits the monitoring light and the welding laser, respectively, and (ii) that, when two optical fibers are

employed, one optical fiber transmits the monitoring light and the other optical fiber transmits the welding laser.

25. (New) The method of claim 24, further comprising fastening an optical fiber to the sheath, thereby providing a fastened optical fiber after step (C) and before step (D), and wherein during step (D), the welding laser is transmitted through the fastened optical fiber while the sheath and the fastened optical fiber are pulled away from the hole.